

FIG.1

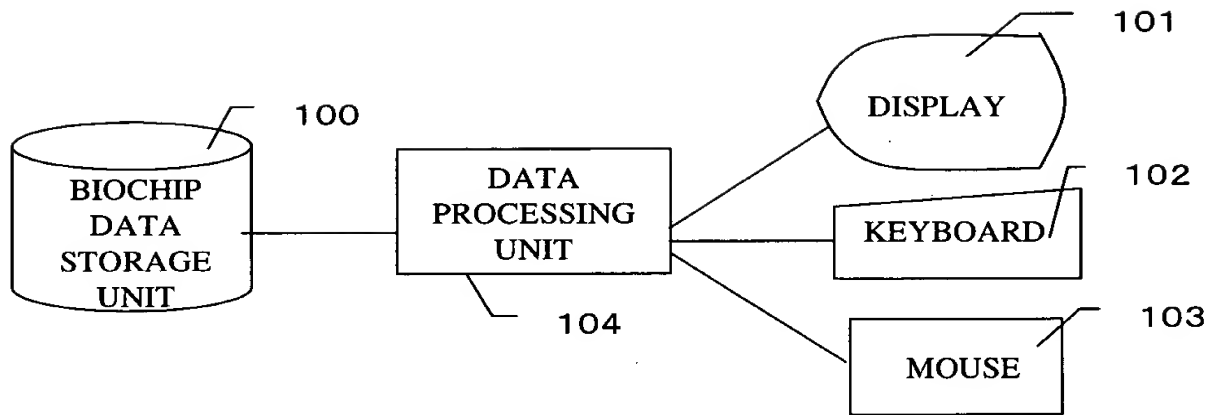


FIG.2

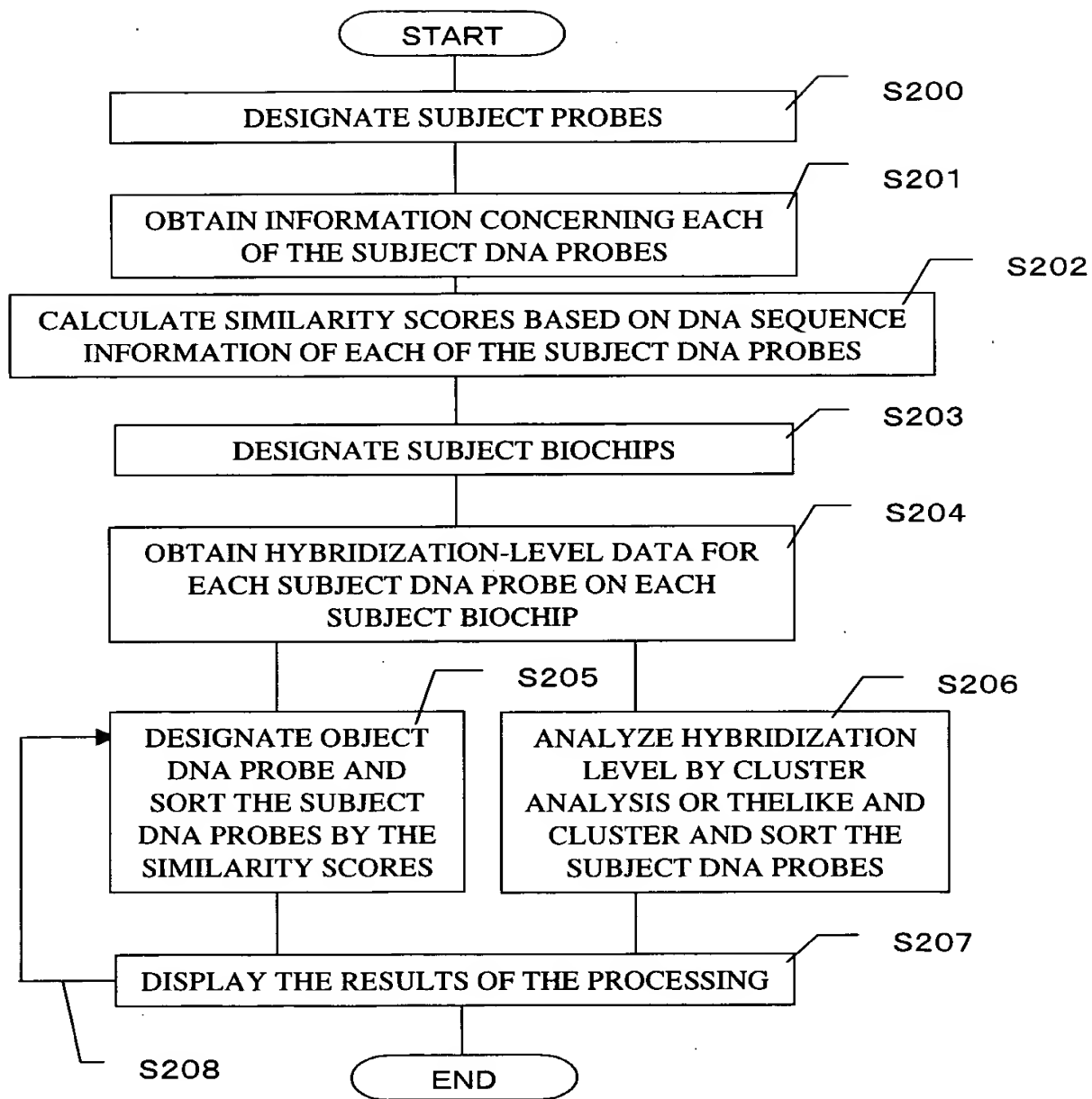


FIG.3

EXAMPLE OF DATA STRUCTURE

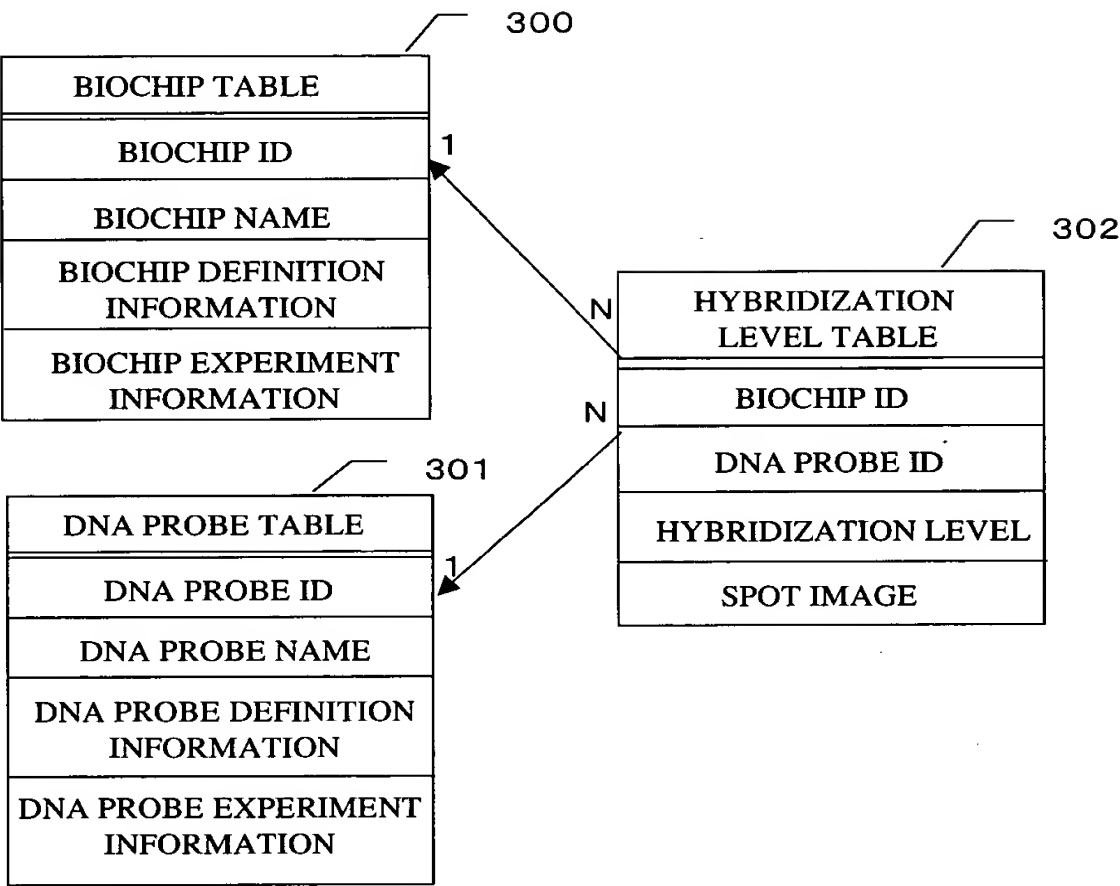


FIG. 3

FIG.4

300

EXAMPLE OF BIOCHIP DATA

BIOCHIP ID	BIOCHIP NAME	BIOCHIP DEFINITION INFORMATION	BIOCHIP EXPERIMENT INFORMATION
1	Chip 1	Definition about Chip 1	Sample from the Stage A (1D)
2	Chip 2	Definition about Chip 2	Sample from the Stage B (3D)
3	Chip 3	Definition about Probe 3	Sample from the Stage C (1W)
:	:	:	
n	Chip n	Definition about Chip n	not used.

FIG.5

301

EXAMPLE OF DNA PROBE DATA

DNA PROBE ID	DNA PROBE NAME	DNA PROBE DEFINITION INFORMATION	DNA PROBE SEQUENCE
1	Probe1	Definition about Probe 1	ACGGGACGTTCCCTCGGAGG
2	Probe2	Definition about Probe 2	ACGGGACGTTCCCCCGGAGG
3	Probe3	Definition about Probe 3	TTTGGACGTTCCAATAGAGG
4	Probe4	Definition about Probe 4	TTTGGACGTTCCAATAGGGG
5	Probe5	Definition about Probe 5	TTGGGACGTTCCAATAGGAG
:	:	:	:
m	Probe m	Definition about Probe n	TTGGGACGTTCCAATAGGAG

FIG.6

EXAMPLE OF HYBRIDIZATION-LEVEL DATA



















302a				302b				302c			
BIOCHIP ID	DNA PROBE ID	HYBRIDIZATION LEVEL	SPOT IMAGE	BIOCHIP ID	DNA PROBE ID	HYBRIDIZATION LEVEL	SPOT IMAGE	BIOCHIP ID	DNA PROBE ID	HYBRIDIZATION LEVEL	SPOT IMAGE
1	1	31,916		2	1	43,416		3	1	21,916	
1	2	224		2	2	41,224		3	2	11,224	
1	3	41,231		2	3	2,107		3	3	10,007	
1	4	24,107		2	4	25,307		3	4	21,107	
1	5	9,607		2	5	1,807		3	5	1,507	
:	:	:		:	:	:		:	:	:	
1	m	9,753		2	m	853		3	m	5,753	

FIG.7

EXAMPLE OF CALCULATED SIMILARITY SCORES

<div>Key</div> <div>Target</div>	Probe1	Probe2	Probe3	Probe4	Probe5
Probe1	80	76	40	56	44
Probe2	76	80	44	52	44
Probe3	40	44	80	36	52
Probe4	56	52	36	80	48
Probe5	44	44	52	48	80

FIG.8

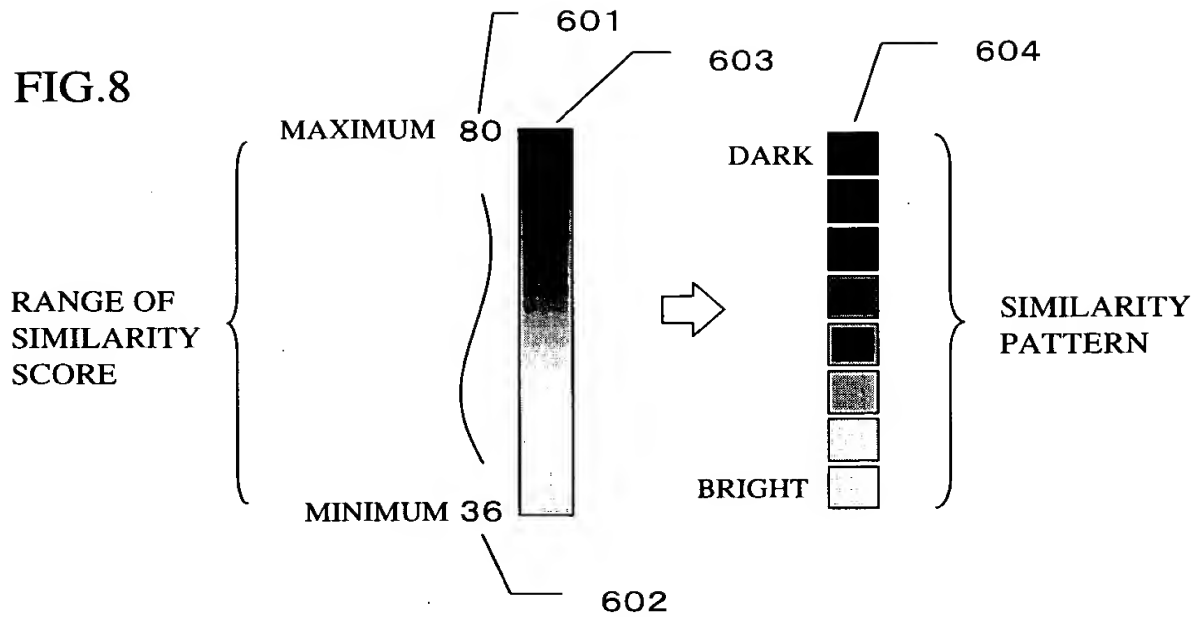


FIG.9

301					605	606
DNA PROBE ID	DNA PROBE NAME	DNA PROBE DEFINITION INFORMATION	DNA PROBE SEQUENCE	SIMILARITY SCORE		SIMILARITY PATTERN
1	Probe1	Definition about Probe 1	ACGGGACGTTCCCTCGGAGG	80	➡	■
2	Probe2	Definition about Probe 2	ACGGGACGTTCCCCCGGAGG	76		■
3	Probe3	Definition about Probe 3	TTTGGACGTTCCAATAGAGG	40		□
4	Probe4	Definition about Probe 4	TTTGGACGTTCCAATAGGGG	56		■
5	Probe5	Definition about Probe 5	TTGGGACGTTCCAATAGGAG	44		□
:	:	:	:			
m	Probe m	Definition about Probe n	TTGGGACGTTCCAATAG...	nn		

*Similarity score is a similarity score of each of the DNA probes with respect to the DNA probe:ID 1.

FIG.10

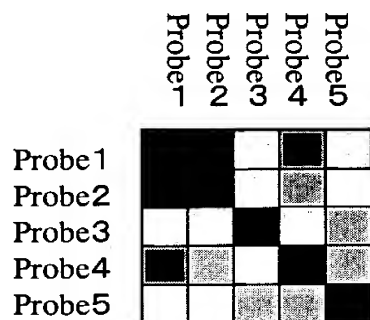


FIG.11

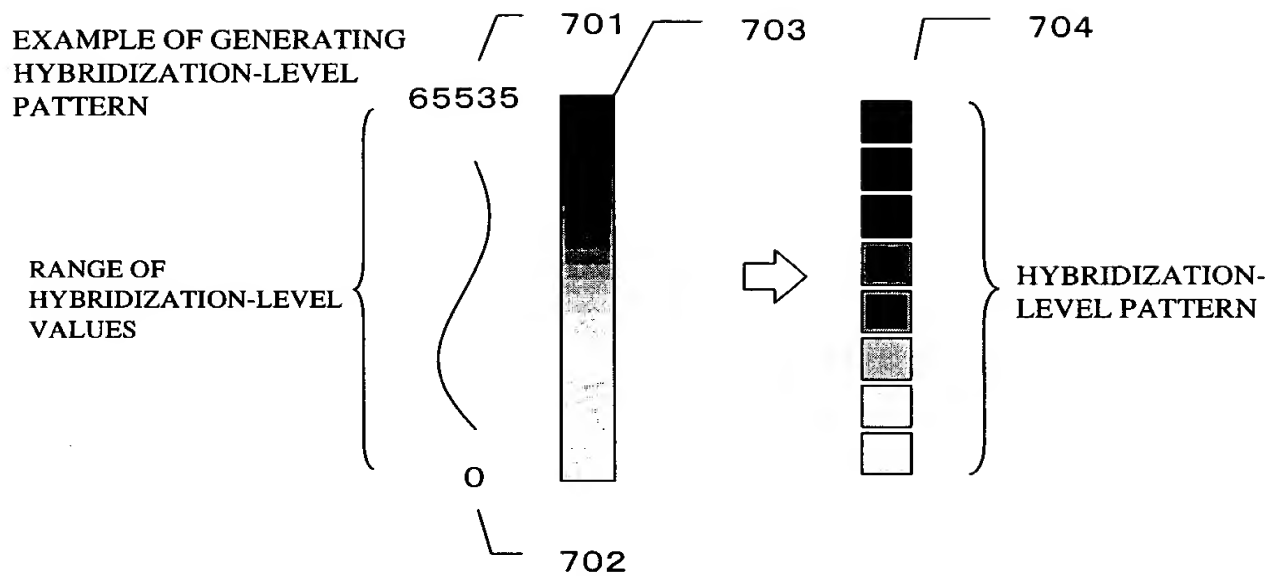


FIG.12

EXAMPLE OF CONVERTING HYBRIDIZATION-LEVEL PATTERN

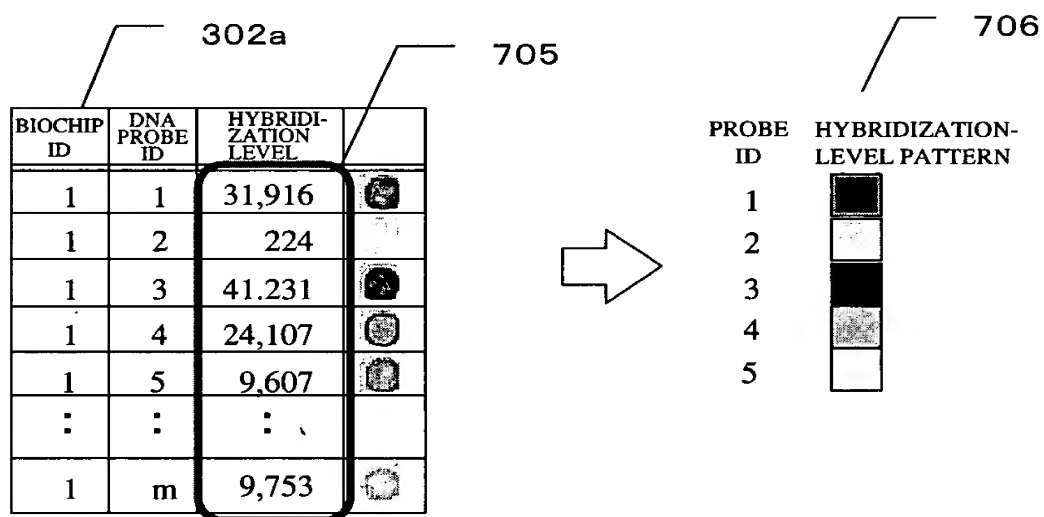


FIG.13

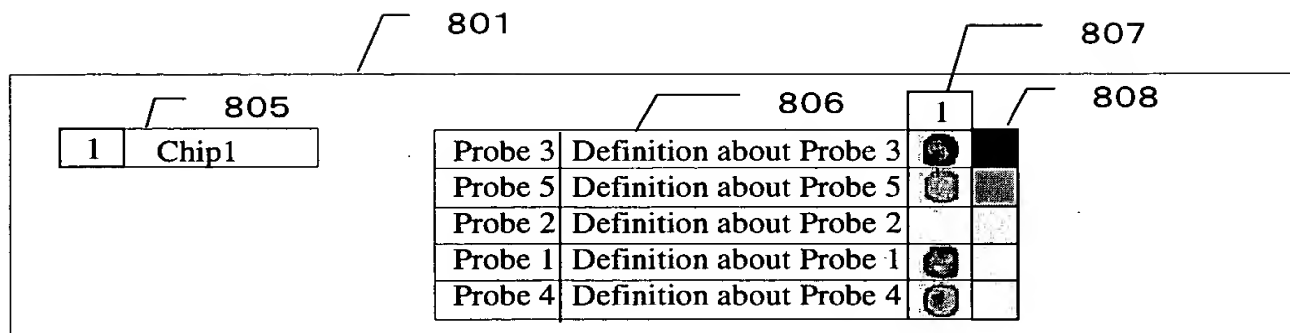


FIG.14

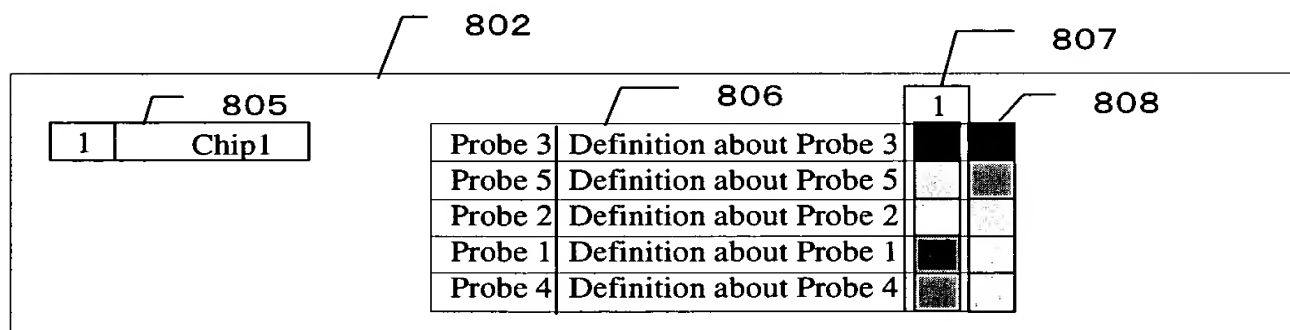


FIG.15

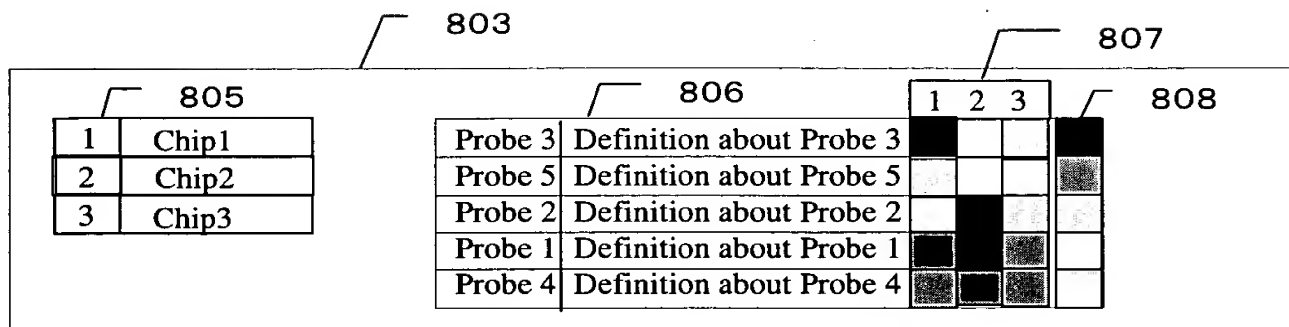


FIG.16

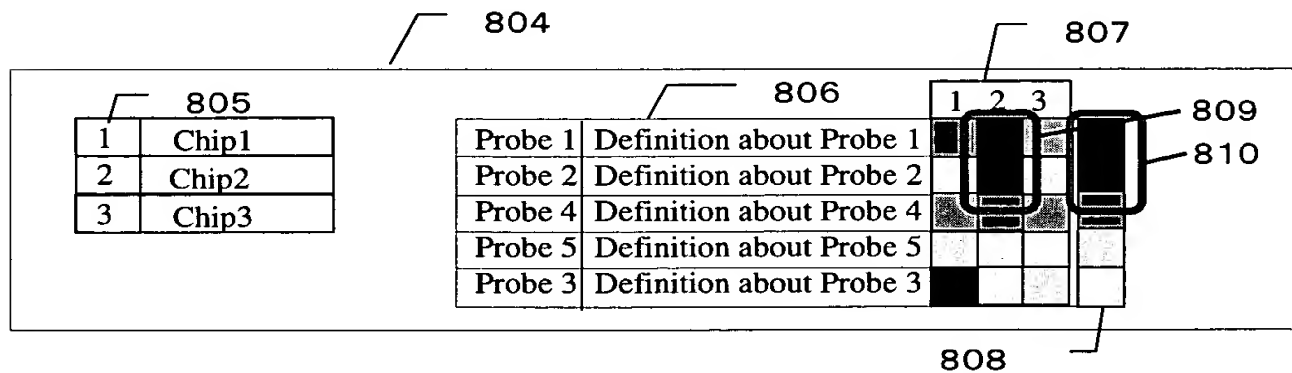


FIG. 17

FIG.17

806		807			901		
		1	2	3			
Probe 1	Definition about Probe 1	■	■	■	■	■	■
Probe 2	Definition about Probe 2	■	■	■	■	■	■
Probe 4	Definition about Probe 4	■	■	■	■	■	■
Probe 5	Definition about Probe 5	■	■	■	■	■	■
Probe 3	Definition about Probe 3	■	■	■	■	■	■

805	
1	Chip1
2	Chip2
3	Chip3

FIG.18

